

Amendments to the Claims

Please amend the claims as follows:

Please cancel claims 5-7, 10-15 and 20-25.

1. (Currently amended) An isolated nucleic acid molecule comprising a polynucleotide having a nucleotide sequence at least 99.8% identical to a sequence selected from the group consisting of:

- (a) a polynucleotide fragment of SEQ ID NO:1 or a polynucleotide fragment of the cDNA sequence included in ATCC Deposit No: PTA-2966, which is hybridizable to SEQ ID NO:1;
- (b) a polynucleotide encoding a polypeptide fragment of SEQ ID NO:2 or a polypeptide fragment encoded by the cDNA sequence included in ATCC Deposit No: PTA-2966, which is hybridizable to SEQ ID NO:1;
- (c) a polynucleotide encoding a polypeptide domain of SEQ ID NO:2 or a polypeptide domain encoded by the cDNA sequence included in ATCC Deposit No: PTA-2966, which is hybridizable to SEQ ID NO:1;
- (d) a polynucleotide encoding a polypeptide epitope of SEQ ID NO:2 or a polypeptide epitope encoded by the cDNA sequence included in ATCC Deposit No: PTA-2966, which is hybridizable to SEQ ID NO:1;
- (e) a polynucleotide encoding a polypeptide of SEQ ID NO:2 or the cDNA sequence included in ATCC Deposit No: PTA-2966, which is hybridizable to SEQ ID NO:1, having potassium channel beta subunit activity;
- (f) a polynucleotide which is a variant of SEQ ID NO:1;
- (g) a polynucleotide which is an allelic variant of SEQ ID NO:1;
- (h) an isolated polynucleotide comprising nucleotides 518 to 1798 of SEQ ID NO:1, wherein said nucleotides encode a polypeptide corresponding to amino acids 2 to 428 of SEQ ID NO:2 minus the start codon;
- (i) an isolated polynucleotide comprising nucleotides 515 to 1798 of SEQ ID NO:1, wherein said nucleotides encode a polypeptide corresponding to amino acids 1 to 428 of SEQ ID NO:2 including the start codon; and

(i) ~~a polynucleotide which represents the complimentary sequence (antisense) of SEQ ID NO:1; and~~

(jk) a polynucleotide capable of hybridizing under stringent conditions to any one of the polynucleotides specified in (a)-(j), wherein said polynucleotide does not hybridize under stringent conditions to a nucleic acid molecule having a nucleotide sequence of only A residues or of only T residues.

2. (Original) The isolated nucleic acid molecule of claim 1, wherein the polynucleotide fragment comprises a nucleotide sequence encoding a human potassium channel beta subunit protein.

3. (Original) A recombinant vector comprising the isolated nucleic acid molecule of claim 1.

4. (Currently amended) A recombinant host cell comprising the vector sequence sequences of claim 3.

5-7. (Canceled)

8. (Currently amended) A recombinant host cell that expresses a polypeptide encoded by the nucleic acid molecule isolated polypeptide of claim 15.

9. (Original) A method of making an isolated polypeptide comprising:

- (a) culturing the recombinant host cell of claim 8 under conditions such that said polypeptide is expressed; and
- (b) recovering said polypeptide.

10-15. (Canceled)

16. (Currently amended) An isolated nucleic acid molecule consisting of a polynucleotide having a nucleotide sequence selected from the group consisting of:

- (a) a polynucleotide encoding a polypeptide of SEQ ID NO:2;

- (b) an isolated polynucleotide consisting of nucleotides 518 to 1798 of SEQ ID NO:1, wherein said nucleotides encode a polypeptide corresponding to amino acids 2 to 428 of SEQ ID NO:2 minus the start codon;
- (c) an isolated polynucleotide consisting of nucleotides 515 to 1798 of SEQ ID NO:1, wherein said nucleotides encode a polypeptide corresponding to amino acids 2 to 428 of SEQ ID NO:2 including the start codon; and
- (d) a polynucleotide encoding the K⁺betaM2 polypeptide encoded by the cDNA clone contained in ATCC Deposit No. PTA-2966; ~~and~~
- ~~(e) a polynucleotide which represents the complimentary sequence (antisense) of SEQ ID NO:41.~~

17. (Original) The isolated nucleic acid molecule of claim 16, wherein the polynucleotide comprises a nucleotide sequence encoding a human potassium channel beta subunit protein.

18. (Original) A recombinant vector comprising the isolated nucleic acid molecule of claim 16.

19. (Original) A recombinant host cell comprising the recombinant vector of claim 18.

20-25. (Canceled)